

State of Washington REPORT OF EXAMINATION FOR WATER RIGHT APPLICATION

PRIORITY DATE 4/3/1998

WATER RIGHT NUMBER S2-29617

MAILING ADDRESS **RUTH JACKSON** 919 FAIRWAY LN ABERDEEN WA 98520 SITE ADDRESS (IF DIFFERENT) 12820 W SHELTON-MATLOCK ROAD **SHELTON WA**

Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE 0.02

UNITS

ANNUAL QUANTITY (AF/YR) 0.34

CFS

Purpose

WITHDRAWAL OR DIVERSION RATE

ANNUAL QUANTITY (AF/YR)

PERIOD OF USE

PURPOSE

NON-ADDITIVE **ADDITIVE**

ADDITIVE

NON-ADDITIVE

(mm/dd)

Domestic Single

UNITS

01/01 - 12/31 0.02 **CFS** 0.34

Source Location

COUNTY MASON

WATERBODY NAHWATZEL LAKE TRIBUTARY TO

WATER RESOURCE INVENTORY AREA

East Fork Satsop

22-LOWER CHEHALIS

SOURCE FACILITY/DEVICE

PARCEL

SEC

QQ Q LATITUDE LONGITUDE

RNG

NAHWATZEL LAKE

520095000011

20N

05W 09 **NW NW**

47.240953

-123.326098

Datum: NAD83/WGS84

Place of Use (See Attached Map)

PARCELS (NOT LISTED FOR SERVICE AREAS) 520095000011

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

Reeve's Tracts - Lk Nahwatzel TR 11 & S.L.

Proposed Works

A 1 ½ inch surface-water intake pipe and 1 horsepower pump serving a single family residence.

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	243			120-13	11-1	1.11

BEGIN PROJECT

COMPLETE PROJECT

PUT WATER TO FULL USE

Started

Completed

January 30, 2016

Measurement of Water Use

How often must water use be measured?

Annually

How often must water use data be reported to

Upon Request by Ecology

Ecology?

What volume should be reported?

Total Annual Volume

What rate should be reported?

Annual Peak Rate of Withdrawal (gpm or cfs)

Provisions

This water right must be relinquished when a public water supply becomes available to the authorized place of use.

Measurements, Monitoring, Metering and Reporting

An approved measuring device shall be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173.

WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Department of Fish and Wildlife Requirement(s)

Pursuant to Chapter 77.55 Revised Code of Washington (RCW), a Hydraulic Project Approval permit must be obtained from the Washington State Department of Fish and Wildlife prior to beginning construction of the diversion. The intake must be screened in accordance with RCW 77.57.010, RCW 77.57.070 and RCW 77.57.040. Contact the Department of Fish and Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091 or (360) 902-2534 if you have questions about screening criteria. http://wdfw.wa.gov/licensing/hpa/

Proof of Appropriation

The water right holder shall file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the permit. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

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This Permit Subject to Cancellation

This permit is subject to cancellation if the permit holder fails to comply with the above development schedule and/or to give notice to the Department of Ecology on forms provided by the Department documenting such compliance.

Findings of Facts

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question; that there will be no impairment of existing rights; that the purpose(s) of use are beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. S2-29617, subject to existing rights and the provisions specified above.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology	Department of Ecology
Attn: Appeals Processing Desk	Attn: Appeals Processing Desk
300 Desmond Drive SE	PO Box 47608
Lacey, WA 98503	Olympia, WA 98504-7608
Pollution Control Hearings Board	Pollution Control Hearings Board
1111 Israel RD SW Ste 301	PO Box 40903
Tumwater, WA 98501	Olympia, WA 98504-0903

Signed at Olympia, Washington, this 20th day of November 2014

Michael J. Gallagher, Section Manager

For additional information visit the Environmental Hearings Office Website: http://www.eho.wa.gov. To find laws and agency rules visit the Washington State Legislature Website: http://www1.leg.wa.gov/CodeReviser.

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INVESTIGATOR'S REPORT Application for Water Right -- Jackson Water Right Control Number S2-29617 Matt Rakow, Department of Ecology

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number S2-29617.

On April 3, 1998 Ruth Jackson filed Application S2-29617 for domestic supply to serve an existing lakefront single-family residence located on Lake Nahwatzel in Mason County. This report describes the proposed project, discusses the geology of the area, investigates potential impairments and evaluates water availability issues raised by the project.

Table 1 Summary of Requested Water Right

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Applicant Name:	Ruth Jackson					
Date of Application:	4/3/1998					
Place of Use	Address: 12820 W Shelton-Matlock Road					

County	Waterbody	Tributary To	WRIA
Mason	Nahwatzel Lake	East Fork Satsop	22-Lower Chehalis

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Single domestic supply	0.02	CFS	0.34	01/01	12/31

Source Name	Parcel	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Nahwatzel Lake	520095000011	20N	05W	09	NW NW	47.240953	-123.326098

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; W.W.M. = West of the Willamette Meridian; Datum: NAD83/WGS84.

Legal Requirements for Approval of Appropriation of Water

General Requirements

RCW 90.03 authorizes the appropriation of public water for beneficial use and describes the process for obtaining water rights. Laws governing the surface water right permitting process are contained in RCW 90.03.250 through 90.03.340. In accordance with RCW 90.03.290, determinations must be made on the following four criteria in order for an application for water rights to be approved:

- Water must be available
- There must be no impairment of existing rights
- The water must be beneficial
- The water must not be detrimental to the public interest

Public Notice

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted and used. Notice of this application was published in the *Shelton-Mason County*

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Journal on July 25 and July 31, 2014. No protests or letters of concern were received in response to this notice.

Consultation with the Department of Fish and Wildlife

The Department must give notice to the Department of Fish and Wildlife (WDFW) of applications to divert, withdraw or store water. Ecology received written comments dated September 26, 2014 from Steve Boessow with WDFW regarding this water right application. WDFW does not oppose the issuance of this water right provided it is issued in an amount consistent with water required for in-house use needs.

State Environmental Policy Act (SEPA)

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met.

- (a) It is a surface water right application for more than 1 cubic foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies;
- (b) It is a groundwater right application for more than 2,250 gallons per minute;
- (c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
- (d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
- (e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because this application does not meet any of these conditions, it is categorically exempt from SEPA and a threshold determination is not required.

INVESTIGATION

My review of this application included, but was not limited to, research and review of the following:

- Department of Ecology's Water Rights Tracking System database and Well Log Image System.
- Mason County Online Parcel Database.
- Water system information from the Department of Health's Sentry database.
- Correspondence from the Department of Fish and Wildlife, Steve Boessow, dated September 24, 2014.
- Email Correspondence from the Department of Fish and Wildlife, Steve Boessow, dated September 26, 2014.
- Email Correspondence from Ruth Jackson dated September 10, 2014
- Rationale for Proposed Amendments of Future Land Use Map and Redesignation of Lake Nahwatzel and Kennedy Creek, Green Diamond Resources, June 1, 2012.
- Chapter 173-522 Washington Administrative Code.
- Chehalis Basin Watershed Management Plan, Approved by the Chehalis Basin Partnership on April 9, 2004 and the Counties of Grays Harbor, Lewis, Mason, and Thurston on May 2, 2004.
- WRIA 22 Fish Passage Inventory within Grays Harbor County Final Report Vol I, Mason Conservation District, January 2007.

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- Chehalis Basin Level I Assessment, December 2000.
- Detailed Summary of Chehalis Basin Level I Assessment, March 2002.
- USGS Surface Water data for USA: Surface-Water Monthly Statistics, USGS 12034200 East Fork Satsop River near Elma, WA.
- Chehalis Basin Partnership 2003 Chehalis Basin Water Quantity Evaluation.

Additionally, in consideration of this application, Matt Rakow and Matthew Rakow conducted a site visit to Lake Nahwatzel on August 20, 2014.

Location and Project Area Description

This application was filed for an existing single-family residence (vacation cabin) located on the southeast shoreline of Lake Nahwatzel (see Attachment 1) at 12820 W Shelton-Matlock Road. According to Mason County tax records, the existing vacation cabin was built in 1968. Lake Nahwatzel is located 11 miles west of the city of Shelton in Mason County, within the Lower Chehalis Water Resource Inventory Area (WRIA 22).

From a review of the 15 surface water claims and 49 groundwater claims for the area surrounding Lake Nahwatzel, it appears development of the Lake Nahwatzel community occurred at a rapid rate during the late 1960s to mid-1970s. Currently, approximately two-thirds of the 2.9 miles of Lake Nahwatzel shoreline is densely developed with single-family residences and vacation cabins. The shoreline lots have predominately been left in a natural state with minimal manicured landscaping. A stretch of shoreline located along the northwest side of Lake Nahwatzel is currently undeveloped and is heavily treed. Residential property greater than about 5 acres in size and property designated as Long Term Commercial Forest surrounds the lakefront lots.

Although approximately one-third of the Lake Nahwatzel shoreline is currently underdeveloped, on March 19, 2013 the Mason County Board of Commissioners approved a rezone request for this undeveloped stretch of shoreline. The rezone request included 250 acres of undeveloped property and about 4,900 feet of shoreline. The change in zoning from Long Term Commercial Forest to Rural Residential 5 allows for a potential of 49 residential lots. As of August 19, 2014 Mason County had not received a development proposal for the site.

Lake Nahwatzel drains via Outlet Creek. Outlet Creek flows from Lake Nahwatzel for approximately ten miles until it reaches the East Fork Satsop River. The major tributaries to the East Fork Satsop River are Decker Creek, Dry Run Creek and Bingham Creek.

The East Fork Satsop River is one of three forks of the Satsop River all of which drain from the Olympic Mountains. The East Fork Satsop is considered a continuation of the mainstem. The Satsop River flows into the Chehalis River between the cities of Montesano and Elma.

Key Geological Features

The Level I Technical Assessment completed for the Chehalis Basin watershed planning process divides WRIA 22 into subbasins for planning purposes. This division includes four Satsop River subbasins: East Fork Satsop River; Decker Creek; Middle Fork Satsop River; and Satsop River. Lake Nahwatzel is located within the East Fork Satsop River subbasin. The Level I Technical Assessment describes the key geological features of the four Satsop River subbasins as follows:

• The Satsop subbasins include volcanic rock underlying the Satsop River's headwaters, glacial till underlying the upper reaches of the main stem's tributaries, and marine sedimentary rock underlying the hill slopes. Bedrock in the middle fork and main stem subbasins likely holds a shallow aquifer, as does the glacial till in the east fork and Decker Creek subbasins. A very high percentage of flow in the east fork subbasin is from groundwater input.

More specifically, Lake Nahwatzel is underlain by a relatively small area of glacial drift in a region dominated by glacial till deposits. The eastern shore of the lake traces the geologic contact between the glacial drift and glacial till. The glacial drift consists of undifferentiated till and outwash containing granitic fragments originating mostly from the northern Cascades. (Logan, 2003)

Proposed Use and Basis of Water Demand

This application requests 0.02 cfs to supply an existing single-family residence. An annual quantity of 0.34 acre-feet per year is sufficient for in-house single domestic supply. This amounts to an average use of approximately 300 gallons per day.

Water Rights Appurtenant to the Place of Use

My review of water right records indicates that there are no ground or surface water rights appurtenant to the place of use of this application.

Impairment Considerations

Impairment is an adverse impact on the physical availability of water for a beneficial use that is entitled to protection. A water right application may not be approved if it would interrupt or interfere with the availability of water at the authorized point of diversion of a surface water right. A surface water right conditioned with in-stream flows may be impaired if a proposed use or change would cause the flow of the stream to fall to or below the in-stream flow more frequently or for a longer duration than was previously the case.

Chapter 173-522 Washington Administrative Code (WAC), filed March 10, 1976, establishes minimum instream flows for 31 streams in the Chehalis River Basin and closes 23 others to new appropriations.

Chapter 173-522 WAC establishes minimum flow requirements for the East Fork Satsop River, to which Lake Nahwatzel is tributary. The minimum flow requirements for the East Fork Satsop River established in 173-522-020(2) WAC range from a low of 80 cubic feet per second (from September 15 through October 31) to a high of 280 cubic feet per second (from January 1 through April 30 and December 1 to December 31). Because this rule is considered a water right which predates this application, the East Fork Satsop River in-stream flows are protected from impairment.

Currently there are no active stream flow gaging stations on the East Fork Satsop River. However, historical stream flow records are available from USGS Gaging Station No. 12034200 from February 1957 to September 1971. USGS Gaging Station No. 12034200 was located at River Mile 15.9, approximately 3 miles from Outlet Creek's confluence with the East Fork Satsop River and approximately thirteen miles from Lake Nahwatzel.

The mean monthly flows in the East Fork Satsop River during the period of record for USGS Gaging Station No. 12034200 range from a low of 92 cubic feet per second in September to a high of 828 cubic feet per second in January. Review of the historic flow record daily average values indicates that

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between February 1957 and September 1971 instream flows were not met an average of 40 days a year during May through August and were not met on 1 day, on average, during September.

Under Chapter 173-522 WAC water rights for domestic and normal stockwatering is exemption from stream closures when no other alternative source of water supply exists. Further, water rights for domestic use, including irrigation of lawn and noncommercial garden not to exceed one-half acre, and livestock use excluding feedlot operations, are defined as superior to all other consumptive and nonconsumptive uses during times of water shortage.

Water Availability

For water to be available for appropriation, it must be both physically and legally available.

Lake Nahwatzel has a volume of about 4,570 acre-feet, has a maximum depth of 25 feet and is 269 acres in size. The East Fork Satsop River basin is estimated to receive 98 inches of rainfall a year.

Existing Surface Water Rights

The Department of Ecology's Water Rights Tracking System (WRTS) database as of August 19, 2014 shows the following records of surface water use from Lake Nahwatzel:

- Two water right certificates authorizing a total diversion of 0.02 cfs and 1.5 acre-feet year for single domestic use.
- Two water right certificates authoring a total diversion of 0.02 cfs and 1.5 acre-feet year for irrigation use.
- 15 claims with listed uses ranging from single domestic to irrigation to group domestic.

Additionally, the WRTS database shows the following records of surface water use from an unnamed stream and/or Outlet Creek with a point of diversion located within Section 8 or Section 9, T20N, R5W:

- One surface water certificate authorizing a total diversion of 0.01 cfs for multiple domestic use.
- One surface water certificate authorizing a total diversion of 0.01 cfs for single domestic use.
- One surface water certificate authorizing a total diversion of 0.02 cfs for fire suppression.

Additionally, the WRTS contains one surface water claim for Outlet Creek at a location approximately one-half mile to one and one-half miles downstream of Lake Nahwatzel for irrigation.

Existing Groundwater Rights

Lake Nahwatzel is located within Sections 05, 06, 08 and 09, T20N, R5W. The Department of Ecology's WRTS database, as of August 19, 2014, shows the following records of groundwater uses within Sections 06, 08 and 09 T20N, R05W:

- One groundwater certificate authorizing a total withdrawal of 30 gallons per minute and 14 acre-feet a year with a priority date of 1969. This certificate represents the source of supply for the Group B water system Resthaven Owners. Resthaven Owners is approved to serve 12 connections.
- 49 groundwater claims.

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Currently that portion of Lake Nahwatzel located within Section 5, T20N, R5W is undeveloped. The WRTS database does not contain records of groundwater use for Section 5, T20N, R5W.

Well Log Records

According to the Department of Ecology's Well Log database, as of August 15, 2014, 54 wells are located within Sections 05, 06, 08 and 09, T20N, R5W with construction dates ranging from 1962 to 2013 and well depths ranging from 32 to 265 feet. Of these 54 wells, about 42 appear to be located either on Lake Nahwatzel shoreline or on property immediately surrounding Lake Nahwatzel. The remaining 12 wells are located within about one-half mile of Lake Nahwatzel. Of these 12 wells, three serve three separate Group B systems (Little Nahwatzel 1, Little Nahwatzel 2, Little Nahwatzel 3) each approved to serve 6 homes.

Comparing well construction dates to the 49 groundwater claims from the same area, it appears likely that fewer than 5 wells as contained in the Department of Ecology's Well Log database represent groundwater claims.

Beneficial Use

The use of water for domestic purposes is defined in statute as a beneficial use (RCW 90.54.020(1)).

Public Interest Considerations

Watershed Planning

In May 2004, Grays Harbor, Lewis, Mason and Thurston counties approved the Chehalis Basin Watershed Management Plan. The Chehalis Basin Watershed Plan provides a vision and framework for water resource management in the Chehalis Basin. The Chehalis Basin Watershed Plan recommends retaining the regulatory instream flows established in 1976 (Chapter 173-522 WAC).

Investigation of Alternatives

Washington State Department of Health records indicate that there are four existing Group B systems in the area: Little Nahwatzel 1, Little Nahwatzel 2, Little Nahwatzel 3 and Resthaven Owners. Hookups to these systems are not available to the proposed place of use and there are currently no plans to develop a public water supply to serve the Lake Nahwatzel area. As the currently undeveloped 250 acres located along the northwest shoreline develops in the future, this situation could change.

Consideration of Protests and Comments

No protests were filed against this application.

Conclusions

- Water is available from Lake Nahwatzel for single domestic use.
- Domestic supply is a beneficial use.
- The proposed appropriation will not impair existing rights.
- The appropriation will not be detrimental to the public interest.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be approved in the amounts and within the limitations listed below and subject to the provisions listed.

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

- 0.02 cfs
- 0.34 acre-feet per year
- Single domestic supply
- Point of Diversion: Section 09, Township 20 North, Range 05 W.W.M
- Place of Use: Tax Parcel 520095000011

MH Khm 11-18-2014

Matt Rakow

Date

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Selected References

Logan, R.L, 2003, Geologic Map of the Shelton 1:100,000 Quadrangle, Washington: Washington Division of Geology and Earth Resources Open File Report 2003-15, 1 sheet, Scale 1:100,000

